

CLAIMS

What is claimed is:

1. A method of responding to a request for information, the method comprising:
 - caching a compression dictionary;
 - receiving a request for information from a requestor;
 - compressing the requested information using the compression dictionary;and
 - sending the compressed information to the requestor with an identifier of the compression dictionary.
2. The method of claim 1 wherein the compressed information may be decompressed directly to an object model document.
3. The method of claim 2 wherein the object model comprises Document Object Model (DOM).
4. The method of claim 1, further comprising:
 - decompressing a received request for information from a requestor.
5. The method of claim 1, further comprising:
 - creating a compression dictionary.
6. A computer readable media with instructions thereon for performing the method of claim 1.
7. A method of sending a request for information, the method comprising:
 - caching a compression dictionary;
 - sending a request for information to a server;
 - receiving the requested information, wherein the information received is compressed; and

decompressing the requested information using the compression dictionary.

8. The method of claim 7, further comprising:
compressing the request for information.

9. The method of claim 7, wherein the compressed information may be decompressed directly to an object model document.

10. The method of claim 9, wherein the object model comprises Document Object Model (DOM).

11. The method of claim 7, further comprising:
obtaining a compression dictionary.

12. The method of claim 7, wherein the information received comprises a compression dictionary identifier, the method further comprising:
using the compression dictionary identifier included with the information received to determine if the proper compression dictionary is cached; and
obtaining the proper compression dictionary if the proper compression dictionary is not in cache.

13. The method of claim 12, wherein calculating a compression dictionary identifier may include determining the identifier using a derived hash value for the dictionary.

14. The method of claim 11, wherein the compression dictionary is retrieved from a network location.

15. A communication system comprising:
a network;
two or more network nodes, wherein the network nodes are interconnected via the network;

- means for compressing messages; and
means for decompressing messages.
16. The communication system of claim 15, further comprising:
means for creating a compression dictionary.
17. The communication system of claim 15, wherein the two or more network nodes are selected from the group consisting of a computer, a mobile phone, a personal digital assistant (PDA), a handheld navigation device, and a printer.
18. A method of communicating over a network, the method comprising:
creating a compression dictionary;
publishing the compression dictionary on a network resource, wherein the compression dictionary is available upon request across the network;
retrieving the compression dictionary from the network;
caching the compression dictionary; and
compressing and decompressing messages received or sent according to the compression dictionary.
19. The method of claim 18, wherein the compression dictionary comprises compressed representations of Extensible Markup Language (XML) tags.
20. The method of claim 18 wherein the compressing and decompressing messages comprises compressing and decompressing messages directly to and from an object model document.
21. The method of claim 20 wherein the object model comprises Document Object Model (DOM).
22. The method of claim 18, wherein creating a compression dictionary comprises:
creating a list of one or more files;

extracting portions of the files from the list of one or more files;
creating a compression dictionary including portions extracted from the
one or more files.

23. The method of claim 18 wherein the network resource comprises a web
service interface.

24. A method of creating a compression dictionary, the method comprising:
creating a list of one or more files;
extracting portions of the files from the list of one or more files;
identifying unique portions extracted from the one or more files;
creating a compression dictionary including unique portions extracted
from the one or more files.

25. The method of claim 24, wherein the extracting portions of the files
comprises extracting Extensible Markup Language (XML) tags.

26. The method of claim 24, further comprising:
counting the occurrences of each unique portion extracted from the one
or more files; and
creating a compression dictionary including the most commonly
occurring unique extracted portions from the one or more files.

27. A method of decompressing a received compressed message, the method
comprising:
receiving a compressed message, wherein the compressed message
contains an identifier for a compression dictionary used to compress the
message;
comparing the compression dictionary identifier of the received message
with an identifier of a cached compression dictionary, wherein if the
compression dictionaries match, the compressed message is decompressed,
further wherein, if the compression dictionaries do not match, obtaining a copy
of the proper compression dictionary.

28. The method of claim 27 wherein the copy of the proper compression dictionary is cached.
29. A communication system comprising:
a server;
a client workstation;
a network, wherein the server and the client workstation are operatively connectable via the network; and
operable software on both the server and client workstation for compressing and decompressing a message for communication over the network, the software including:
instructions for encoding and decoding a message according to a compression dictionary, wherein the compression dictionary maps a character segment to a character code.
30. The communication system of claim 29 wherein the character segment is an Extensible Markup Language (XML) tag.
31. The communication system of claim 29 wherein the character code is a single character.
32. The communication system of claim 29 further comprising:
operable software on at least one of the client and the server for creating a compression dictionary, the software including:
instructions for identifying and extracting character segments of one or more files, wherein the character segments appear one or more times in the one or more files, and
instructions for creating a compression dictionary based on extracted character segments from the one or more files, wherein the compression dictionary maps the extracted character segments to a character code.

33. The communication system of claim 32, wherein the character segments are Extensible Markup Language (XML) tags.

34. The communication system of claim 33 wherein the character code is a single character.

35. A method of responding to a request for information, the method comprising:

- creating a compression dictionary tailored for selected information;
- receiving a request for at least a portion of the selected information from a requestor;
- customizing the information for the requestor;
- dynamically compressing the customized requested information using the compression dictionary; and
- sending the compressed information to the requestor with an identifier of the compression dictionary.